

NARROW WIDE SPACER

ABSTRACT

5 A method for fabricating a semiconductor device. Specifically, A method of manufacturing a
semiconductor device comprising: depositing a first oxide layer over a periphery transistor comprising a
gate stack, a drain side sidewall and a source side sidewall and over a core transistor comprising a gate
stack, a source side sidewall and a drain side sidewall; etching the first oxide layer wherein a portion of the
10 first oxide layer remains on the source side sidewall and on the drain side sidewall of the periphery
transistor and on the source side sidewall and on the drain side sidewall of the core transistor; etching the
first oxide layer from the source side sidewall of the core transistor; depositing a second oxide layer over
the periphery transistor and the core transistor; and etching the second oxide layer wherein a portion of the
15 second oxide layer remains on the first oxide layer formed on the source side sidewall and on the drain side
sidewall of the periphery transistor and wherein the second oxide layer remains on the source side sidewall
and on the drain side sidewall of the core transistor.